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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/694,898

10/29/2003

Chun-Chen Chiu

BHT-3215-54

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03/23/2005

Troxell Law Office PLLC

Suite 1404

5205 Leesburg Pike

Falls Church, VA 22041

EXAMINER

GONZALEZ, JULIO C

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 03/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/694,898

Applicant(s)

CHIU, CHUN-CHEN

Examiner

Julio C. Gonzalez

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Specification*

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Shoe Generator Having a Shaft With Forward/Reverse Movement.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang (US 6,744,145) in view of Stegeman et al (US 3,824,420).

Chang discloses a generator having a base 327, an annular stator 5 (see figure 6), a rotor base 62 mounted on the base 327 and the rotor base 62 having a central hole (see figure 5) and a rotor 71 mounted around the rotor base 62 and having a gap between the rotor 71 and the stator 5 (see figure 9), a drive shaft 41 mounted in the central hole in the rotor base 62 (see figure 5) and a top cover 3 mounted on the base 327 to cover the stator 5, rotor base 62, drive shaft 41 and the

cover 3 has a central bore through through which the drive shaft 41 extends (see figure 9).

However, Chang does not disclose having a drive shaft with spiral grooves and a key formed on an inner surface of a central hole.

On the other hand, Stegeman et al teaches for the purpose of improving the stability of equilibrium positions between rotating elements and providing a rapid rotational movement, an element 1 with a drive shaft movement and having spiral grooves 3 and having key 4 formed on inner surface of a central hole (see figure 1) and the key 4 being slidably mounted on the spiral grooves 3 (see figure 3).

Moreover, it is taught that a biasing member 14 is mounted between the base 19 and the element 1 to provide a restitution force to the element 1 (see figure 3 & column 3, lines 42-44). Moreover, Stegeman teaches that it is known to provide a biasing member 14 mounted around an axial rod 22 having two ends and abutting the base 19 and the bottom of the drive shaft movement element 23 (see figures 1-4) and the element 23 with a shaft movement has a hole defined in the bottom for receiving the axial rod 22 (see figures 3, 4).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design a generator as disclosed by Chang and to modify the invention by using the teachings of Stegeman et al for the purpose of

improving the stability of equilibrium positions between rotating elements and providing a rapid rotational movement as taught by Stegeman et al.

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chang and Stegeman et al as applied to claim 1 above, and further in view of Shallcross (US 1,354,698).

The combined generator discloses all of the elements above. However, the combined generator does not disclose a drive shaft having a rib, which is inserted into a keyway.

On the other hand, Shallcross teaches for the purpose of protecting the shaft from breakage by preventing the shaft being strained beyond its limits, a shaft 1 having a rib 13a formed on the outer surface and being slidably mounted in a keyway (see figure 1a), which keeps the shaft 1 from rotating (page 2, lines 99-105):

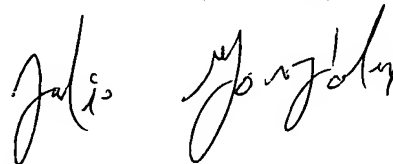
It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined generator as disclosed above and to use the teachings of using a shaft with a rib being mounted into a keyway for the purpose of protecting the shaft from breakage by preventing the shaft being strained beyond its limits as taught by Shallcross.

*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio C. Gonzalez whose telephone number is 571-272-2024. The examiner can normally be reached on M-F (8AM-5PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Julio C. Gonzalez', is positioned above the printed name.

Julio C. Gonzalez  
Examiner  
Art Unit 2834

Jcg  
March 17, 2005